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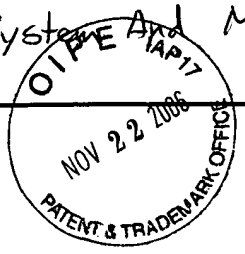
CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8) Applicant(s):			Docket No. WS-0001	
Application No. 10/730,678	Filing Date 12/8/03	Examiner John J. Wilson	Customer No.	Group Art Unit 3732

Invention:

System And Method For Remotely Controlling Devices



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	THOMAS P. WARNER	)
		) Group Art Unit:
		) 3732
SERIAL NUMBER:	10/730,678	)
		)
FILED:	December 8, 2003	) Examiner:
		) John J. Wilson
		)
FOR:	SYSTEM AND METHOD FOR REMOTELY CONTROLLING DEVICES	)

APPEAL BRIEF

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1. THE REAL PARTY IN INTEREST

The real party in interest in this appeal is Warner Systems, LLC. Ownership by Warner Systems, LLC is established by an assignment document recorded for this application on August 9, 2004 on Reel 015662 Frame 0938.

2. RELATED APPEALS AND INTERFERENCES

Applicant has filed a Notice of Appeal for U.S. Patent Application No. 10/464,369 filed on June 17, 2003. The Notice of Appeal was filed on July 11, 2006.

3. STATUS OF CLAIMS

Claims 1, 4, 5, 7-18, 20, 22, and 24-30 are currently pending and are the claims on appeal.

Claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beier et al., (U.S. Patent No. 4,571,681) hereinafter Beier '681 in view of Murry et al., (U.S. Patent No. 4,156,187) and Beier et al., (U.S. Patent No. 4,305,126) hereinafter Beier '126.

Claims 8-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beier '681 in view of Murry et al. and Beier '126 and further in view of Jones et al. (U.S. Patent No. 4,114,275).

Claims 18 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beier '681 in view of Murry et al. and Beier '126, and further in view of Fornoff et al. (U.S. Patent No. 5,931,669).

Claims 29 and 30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beier '681 in view of Murry et al. and Beier '126, and further in view of Nash, U.S. Patent No. (4,171,572).

4. STATUS OF AMENDMENTS

Applicant submits that no amendments were filed subsequent to the second Final Office Action of August 15, 2006.

5. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed to a system for remotely controlling devices. The system includes a foot pedal unit having a moveable member. See Figure 3 having foot pedal unit 84 with moveable member 88; and page 8, lines 27-29. The system further includes a first microprocessor operatively associated with the foot pedal unit and an RF transmitter. See Figure 3 having microprocessor 62, foot pedal unit 84, and RF transceiver 70, and page 7, lines 8-10, and page 4, line 26. The first microprocessor is configured to determine whether at least a first device or a second device is selected. In one exemplary embodiment, the first microprocessor utilizes a received Device Actuation Unit ID from the hand-held unit 12 to determine which device is selected. See Figure 12A having step 260. The first microprocessor is further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected. See Figure 13A having step 292, and page 2, lines 5-10, and page 21, lines 7-12. The first RF signal has a first identifier value. See Figure 9 having Device Actuation message with Device Actuation Unit ID, and page 21, lines 7-10. The first microprocessor is further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected. See page 2, lines 5-10. The second RF signal has a second identifier value. The first device actuation unit is configured to receive the first RF signal. See Figure 13A having step 294. The first device actuation unit is further configured to compare the first identifier value to a first predetermined value associated with the first device. See Figure 13A having step 296 and Figure 13B having step 310. The first device actuation unit is further configured to actuate the first device when the first identifier value corresponds to the first predetermined value. See Figure 13A having step 298.

Dependent claim 8 recites that the system of claim 1 further includes a pneumatic valve coupled to a conduit. See Figure 3 having pneumatic valve 90, conduit 86, and moveable member 88. The valve is operatively coupled to the moveable member. The system further including a pneumatic switch operatively coupled to the first microprocessor and to the conduit. See Figure 3 having pneumatic switch 94 and microprocessor 62. At least partial displacement of the moveable member actuates the pneumatic valve increasing a pressure in the conduit, when the pressure is greater than a predetermined pressure the pneumatic switch is actuated inducing the first microprocessor to induce the RF transmitter to transmit the first RF signal. See page 9, lines 3-16.

Dependent claim 9 recites that the system of claim 1 further includes a pneumatic valve operatively coupled to a conduit. See Figure 3 having pneumatic valve 90, conduit 86, and moveable member 88. The valve is further operatively coupled to the movable member. The valve opens in response to at least partial displacement of the moveable member. The system further includes a pressure sensor coupled to the conduit generating a pressure signal indicative of the pressure in the conduit that is transmitted to the first microprocessor. See Figure 3 having pressure sensor 94' and page 9, lines 3-16.

Dependent claim 18 recites that the first device of the system of claim 1 is a video capture board. See Figure 18 having video capture card 410. The system further comprising a first device actuation unit operatively coupled to the video capture board. See Figure 18 having device actuation unit 16 and video capture card 410. The first device actuation unit configured to receive the first RF signal and to induce the video capture board to store a video image in a memory in response to the first RF signal. See page 26, lines 3-7.

Independent claim 22 is directed to a method for remotely controlling devices. The method includes determining when a first device is selected, utilizing a microprocessor. In one exemplary embodiment, the first microprocessor utilizes a received Device Actuation

Unit ID from the hand-held unit 12 to determine which device is selected. See Figure 12A having step 260. The method further includes inducing an RF transmitter to transmit a first RF signal having a first identifier value in response to at least partial displacement of a moveable member on a foot pedal unit when the first device is selected, utilizing the microprocessor. See Figure 3 having microprocessor 62, foot pedal unit 84, and RF transceiver 70, and Figure 9 having Device Actuation message with Device Actuation Unit ID, and Figure 13A having step 292, and page 2, lines 5-10, and page 21, lines 7-12. The method further includes determining when a second device is selected, utilizing the microprocessor. In one exemplary embodiment, the first microprocessor utilizes a received Device Actuation Unit ID from the hand-held unit 12 to determine which device is selected. The method further includes inducing the RF transmitter to transmit a second RF signal having a second identifier value in response to at least partial displacement of the moveable member on the foot pedal unit when the second device is selected, utilizing the microprocessor. The method further includes receiving the first RF signal at a device actuation unit. See Figure 13A having step 294. The method further includes comparing the first identifier value to a first predetermined value associated with the first device. See Figure 13A having step 296 and Figure 13B having step 310. The method further includes controlling the first device utilizing the device actuation unit based on the first RF signal when the first identifier value corresponds to the first predetermined value associated with the first device. See Figure 13A having step 298.

Dependent claim 27 recites the controlling step of the method of claim 22 includes inducing a video capture board to store a video image in a memory in response to the first signal. See Figure 18 having device actuation unit 16 and video capture card 410, and page 26, lines 3-7.

Dependent claim 29 recites that the first device actuation unit of the system of claim 28 is further configured to receive the third RF signal and to maintain activation of the first device during a first time period from at least receipt of the first RF signal to receipt of the third RF signal, if the first time period is less than or equal to a threshold time period. See Figure 13A having steps 298, 300, and 302.

Dependent claim 30 recites that the method of claim 22 further includes inducing the RF transmitter to transmit a third RF signal having the first identifier value in response to at least partial displacement of the moveable member when the first device is selected. See Figure 13A step 292. The method further includes receiving the third RF signal at the device actuation unit and maintaining activation of the first device during a first time period from at least receipt of the first RF signal to receipt of the third RF signal, if the first time period is less than or equal to a threshold time period. See Figure 13A having steps 298, 300, and 302.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether the claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 are unpatentable under 35 U.S.C. §103(a) over Beier '681 in view of Murry et al. and Beier '126.

Whether the claims 8-11 are unpatentable under 35 U.S.C. §103(a) over Beier '681 in view of Murry et al. and Beier '126 and further in view of Jones et al.

Whether the claims 18 and 27 are unpatentable under 35 U.S.C. §103(a) over Beier '681 in view of Murry et al., and Beier '126, and further in view of Fornoff et al.

Whether the claims 29 and 30 are unpatentable under 35 U.S.C. §103(a) over Beier '681 in view of Murry et al. and Beier '126, and further in view of Nash.

7. ARGUMENT

A. THE EXAMINER'S REJECTION OF CLAIMS 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 UNDER 35 U.S.C. §103(a) IS IMPROPER

The Examiner's rejection of claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 under 35 U.S.C. §103(a) is improper because the Examiner has not identified any proper motivation for the proposed combination of references and the combination of references do not teach each and every limitation of the claims.

i. The Examiner's rejections of claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 under 35 U.S.C. §103(a) based on Beier '168, Murry et al, and Beier '126 is improper because the Examiner has not identified any proper motivation for the proposed combination of references.

Referring to Beier '681, the reference is directed to a switching arrangement for controlling instruments. Referring to Figure 1, the switching arrangement utilizes a control data memory 7 and a data router 10 to determine which of instruments I, II, II, and IV have been withdrawn from its holder. A control component 12 is coupled to the data router 10 and a foot actuated voltage supply 75. The control component 12 supplies a variable voltage level of 1-10 volts to the control elements 42, 43, 44, 45 to control operation of the instruments utilizing the voltage supply. See column 2, lines 9-13, column 5, lines 17-24, and Figure 1 of Beier '681. Applicant further notes that an objective of the Beier '681 system is to supply a variable voltage level to the control elements for variable control of the devices. See column 2, lines 9-13 of Beier '681.

Referring to Murry et al., Figure 13 illustrates a transmitter having an ultrasonic transducer 288 coupled to an oscillator 282. The oscillator 288 induces the ultrasonic transducer 288 to output ultrasonic energy at different output frequencies, where each frequency corresponds to a different device to be controlled by an ultrasonic receiver. It

should be noted that no information values are transmitted in the ultrasonic energy of the transducer 288 of Murry et al. A receiver 290 having an ultrasonic transducer 291 detects the ultrasonic energy and a frequency detector 293 turns on a first device when it receives a first frequency and the frequency detector 294 turns on a second device when it receives a second frequency. See column 19, lines 67-68 and column 20, lines 1-7 of Murry et al.

Assuming that the transmitter and receiver of Murry et al. were somehow combined with the switching arrangement of Beier '681, applicant submits that the combination would destroy the functionality of the switching arrangement of Beier '681. As discussed above with respect to Beier '681, the foot actuated voltage supply 75 supplies a variable output voltage to the control elements 42, 43, 44, 45 to variably control operation of the instruments. Further, the transmitter of Murry et al. can merely transmit signals having different frequencies for selecting different devices. Thus, the Murry et al. transmitter does not include any information in the ultrasonic energy, for variably controlling operation (e.g., variably controlling speed) of the instruments as required by Beier '681. Thus, the combination of Beier '681 and Murry et al. would destroy the intended functionality of Beier '681, because the instruments could not be variably controlled. Applicant further notes that the addition of a microprocessor of Beier '126 would still result in a combination of references that would destroy the intended functionality of Beier '681.

Because no proper motivation has been identified for the proposed combination, applicant submits that the rejection of claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 based on Beier '681, Murry et al, and Beier '126 under 35 U.S.C. §103(a) is improper.

ii. The Examiner's rejections of claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 under 35 U.S.C. §103(a) based on the combination of Beier '168, Murry et al, and Beier '126 are improper because the proposed combination of references does not teach each and every limitation of the claims.

Independent claim 1 is directed to a system for remotely controlling devices and includes the following limitations:

"a foot pedal unit having a moveable member;

a first microprocessor operatively associated with the foot pedal unit and an RF transmitter, the first microprocessor configured to determine whether at least a first device or a second device is selected, the first microprocessor further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected, the first RF signal having a first identifier value, the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected, the second RF signal having a second identifier value; and

a first device actuation unit configured to receive the first RF signal, the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device, the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the first predetermined value." Independent claim 22 is directed to a method having similar limitations.

Applicant notes that the Examiner's asserted that neither Beier '681 nor Murry et al. provide any specific teaching of a radio frequency receiver unit during prosecution of U.S. patent application 10/464,369. See Final Office Action of July 5, 2006 for U.S. patent application 10/464,369, page 3, lines 1-2. In other words, neither Beier '681 nor Murry et al. provide any specific teaching of an RF receiver unit capable of receiving RF signals. Applicant concurs with the foregoing assertion. Murry et al. does indicate "The foot switch 94 operates similar to the wireless control 86 which is, however, a remote R.F. transmitter, while in the model illustrated in Figure 3 a cable 96 hard-wire connects the control 94 to the machine." See column 14, lines 31-35. Applicant notes, however, that the term R.F. is not defined in Murry et al. Accordingly, it is unclear as to whether the term "R.F." in Murry et al. corresponds to the words "remote function", "remote frequency", "radio frequency", or some other word combination. Further, if one construes the term "R.F." in Murry et al. to mean radio frequency, the resulting system in Murry et al. would simply not be functional since there is no teaching of a radio frequency receiver for

receiving radio frequency signals. In contrast, Murry et al. explicitly teaches utilizing an ultrasonic receiver to receive ultrasonic energy. See Murry et al., column 19, lines 67-68 to column 20, lines 1-2. Accordingly, applicant submits that Murry et al. does not provide any teaching of a device actuation unit configured to receive the first RF signal as recited in independent claims 1 and 22. Further, Beier '126 does not provide any teaching of a device actuation unit configured to receive the first RF signal as recited in independent claims 1 and 22.

Applicant further notes that it unclear as to whether Murry et al. discloses a radio frequency transmitter configured to transmit a radio frequency signal, as recited in claims 1 and 22. In particular, as discussed above, the term "R.F." is not clearly defined in Murry et al. Further, Murry et al. does not disclose any component capable of receiving a radio frequency signal.

Further, the combination of Beier '681, Murry et al., and Beier '126 does not provide any teaching of: "the first microprocessor further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected, the first RF signal having a first identifier value", as recited in claim 1, and similarly recited in claim 22. In particular, applicant notes that there is no teaching in any of these references, and in particular Murry et al., of a microprocessor configured to induce an RF transmitter to transmit an RF signal. In contrast, Referring to Figure 13 of Murry et al., the transmitter utilizes an oscillator 282 to output ultrasonic energy when a switch is closed. Applicant further notes that there is no teaching in any of these references of an identifier value in an RF signal to identify which device is selected, as recited in independent claims 1 and 22.

Further, the combination of Beier '681, Murry et al., and Beier '126 does not provide any teaching of "the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected, the second RF signal having a

second identifier value" as recited in independent claim 1, and similarly recited in independent claim 22.

Further, the combination of Beier '681, Murry et al., and Beier '126 does not provide any teaching of "the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device, the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the first predetermined value" as recited in claim 1, and similarly recited in independent claim 22.

Because the proposed combination of Beier '681, Murry et al., and Beier '126 does not teach each and every limitation of independent claims 1 and 22, and claims 4, 5, 7, 12-17, 20, 24-26 and 28 which depend from one of claims 1 and 22, applicant submits that the rejection of claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 under 35 U.S.C. §103(a) is improper.

B. THE EXAMINER'S REJECTION OF CLAIMS 8-11 UNDER 35 U.S.C. §103(a) IS IMPROPER

The Examiner's rejection of claims 8-11 under 35 U.S.C. §103(a) is improper because the combination of references does not teach each and every limitation of the claims. Dependent claim 8 stands or falls alone. Dependent claim 9 stands for falls alone. Dependent claim 10 stands or falls alone. Dependent claim 11 stands or falls alone.

i. The Examiner's rejection of claim 8 under 35 U.S.C. §103(a) based on the combination of Beier '681, Murry et al, Beier '126, and Jones et al. is improper because the proposed combination of references does not teach each and every limitation of the claim.

Dependent claim 8 recites:

"The system of claim 1 further comprising a pneumatic valve coupled to a conduit, the valve further operatively coupled to the moveable member, the system further including a pneumatic switch operatively coupled to the first microprocessor and to the conduit, wherein at least partial displacement of the moveable member actuates the pneumatic valve increasing a pressure in the conduit, when the pressure is greater than a predetermined pressure the pneumatic switch is actuated inducing the first microprocessor to induce the RF transmitter to transmit the first RF signal."

Jones et al. does disclose a diaphragm operated electrical switch 70 that is pneumatically connected with an air tube from the foot pedal device 20. See Figure 3 of Jones et al. However, Jones et al. does not provide any teaching of a pneumatic switch operatively coupled to a microprocessor such that when the pressure level is greater than a predetermined pressure the pneumatic switch is actuated inducing the first microprocessor to induce the RF transmitter to transmit the first RF signal, as recited in claim 8. Applicant also notes that the combination of Beier '681, Murry et al., and Beier '126 does not teach the foregoing limitations.

Because the proposed combination of Beier '681, Murry et al., Beier '126, and Jones et al. does not teach each and every limitation of claim 8, applicant submits that the rejection of claim 8 under 35 U.S.C. §103(a) is improper.

ii. The Examiner's rejection of claim 9 under 35 U.S.C. §103(a) based on the combination of Beier '681, Murry et al, Beier '126, and Jones et al. is improper because the proposed combination of references does not teach each and every limitation of the claim.

Dependent claim 9 recites:

"The system of claim 1 further comprising a pneumatic valve operatively coupled

to a conduit, the valve being further operatively coupled to the movable member, the valve opening in response to at least partial displacement of the moveable member, the system further including a pressure sensor coupled to the conduit generating a pressure signal indicative of the pressure in the conduit that is transmitted to the first microprocessor."

As discussed above, Jones et al. does disclose a diaphragm operated electrical switch 70 that is pneumatically connected with an air tube from the foot pedal device 20. However, Jones et al. does not provide any teaching of a pressure sensor coupled to the conduit generating a pressure signal indicative of the pressure in the conduit that is transmitted to the first microprocessor, as recited in claim 9. Applicant also notes that the combination of Beier '681, Murry et al., and Beier '126 does not teach the foregoing limitations.

Because the proposed combination of Beier '681, Murry et al., Beier '126, and Jones et al. does not teach each and every limitation of claim 9, applicant submits that the rejection of claim 9 under 35 U.S.C. §103(a) is improper.

iii. The Examiner's rejection of claim 10 under 35 U.S.C. §103(a) based on the combination of Beier '681, Murry et al, Beier '126, and Jones et al. is improper because the proposed combination of references does not teach each and every limitation of the claim.

Dependent claim 10 recites:

"The system of claim 9 wherein the first microprocessor is configured to induce the RF transmitter to generate the first RF signal when the pressure signal indicates the pressure is greater than a predetermined pressure."

As discussed above, Jones et al. does disclose a diaphragm operated electrical switch 70 that is pneumatically connected with an air tube from the foot pedal device 20. However, Jones et al. does not provide any teaching of a microprocessor configured to

induce the RF transmitter to generate the first RF signal when the pressure signal indicates the pressure is greater than a predetermined pressure, as recited in claim 10. Applicant also notes that the combination of Beier '681, Murry et al., and Beier '126 does not teach the foregoing limitations.

Because the proposed combination of Beier '681, Murry et al., Beier '126, and Jones et al. does not teach each and every limitation of claim 10, applicant submits that the rejection of claim 10 under 35 U.S.C. §103(a) is improper.

iv. The Examiner's rejection of claim 11 under 35 U.S.C. §103(a) based on the combination of Beier '681, Murry et al, Beier '126, and Jones et al. is improper because the proposed combination of references does not teach each and every limitation of the claim.

Dependent claim 11 recites:

" The system of claim 9 wherein the first microprocessor is configured to induce the RF transmitter to generate the first RF signal containing a command value determined from the pressure signal."

As discussed above, Jones et al. does disclose a diaphragm operated electrical switch 70 that is pneumatically connected with an air tube from the foot pedal device 20. However, Jones et al. does not provide any teaching of a microprocessor is configured to induce the RF transmitter to generate the first RF signal containing a command value determined from the pressure signal. Applicant also notes that the combination of Beier '681, Murry et al., and Beier '126 does not teach the foregoing limitations.

Because the proposed combination of Beier '681, Murry et al., Beier '126, and Jones et al. does not teach each and every limitation of claim 11, applicant submits that the rejection of claim 11 under 35 U.S.C. §103(a) is improper.

C. THE EXAMINER'S REJECTION OF CLAIMS 18 and 27 UNDER 35 U.S.C. §103(a) IS IMPROPER

The Examiner's rejection of claims 18 and 27 under 35 U.S.C. §103(a) is improper because the combination of references does not teach each and every limitation of the claims. Dependent claim 18 stands or falls alone. Dependent claim 27 stands for falls alone.

i. The Examiner's rejection of claim 18 under 35 U.S.C. §103(a) based on the combination of Beier '681, Murry et al, Beier '126, and Fornoff et al. is improper because the proposed combination of references does not teach each and every limitation of the claim.

Dependent claim 18 recites:

"The system of claim 1 wherein the first device comprises a video capture board, the system further comprising a first device actuation unit operatively coupled to the video capture board, the first device actuation unit configured to receive the first RF signal and to induce the video capture board to store a video image in a memory in response to the first RF signal."

Referring to Fornoff et al., the reference discloses "when another instrument, for example having an integrated video camera, such as an instrument 16 or 16, is subsequently taken, then the logic circuit in the device G2 activates the respective program in the personal computer which is switched to the instrument program allocated for this instrument that has now been pulled. With reference to the stored program, for example, a trigger switch present at the instrument or foot switch can "freeze" a specific video frame if desired." See Fornoff et al., column 4, lines 30-38. The foregoing paragraph indicates that a stored program in the personal computer itself stores a video frame, not a video capture board as recited in claim 18. Applicant also notes that the combination of Beier '681, Murry et al., Beier '126 does not mention use of a video capture card. Applicant further notes that none of references teach a device actuation unit configured to receive an RF

signal.

Accordingly, the combination of Beier '681, Murry et al., Beier '126, and Fornoff et al. does not provide any teaching of: "first device actuation unit configured to receive the first RF signal and to induce the video capture board to store a video image in a memory in response to the first RF signal" as recited in claim 18

Because the proposed combination of Beier '681, Murry et al., Beier '126, and Fornoff et al. does not teach each and every limitation of claim 18, applicant submits that the rejection of claim 18 under 35 U.S.C. §103(a) is improper.

ii. The Examiner's rejection of claim 27 under 35 U.S.C. §103(a) based on the combination of Beier '681, Murry et al, Beier '126, and Fornoff et al. is improper because the proposed combination of references does not teach each and every limitation of the claim.

Dependent claim 27 recites:

The method of claim 22 wherein the controlling step includes inducing a video capture board to store a video image in a memory in response to the first signal.

Referring to Fornoff et al., the reference indicates that a stored program in the personal computer itself stores a video frame, not a video capture board as recited in claim 18. See Fornoff et al., column 4, lines 30-38. Applicant also notes that the combination of Beier '681, Murry et al., Beier '126 does not mention use of a video capture card. Accordingly, applicant submits that the combination of Beier '681, Murry et al., Beier '126, and Fornoff et al. does not teach inducing a video capture board to store a video image in a memory in response to the first signal, as recited in claim 27.

Because the proposed combination of Beier '681, Murry et al., Beier '126, and Fornoff et al. does not teach each and every limitation of claim 27, applicant submits that the rejection of claim 27 under 35 U.S.C. §103(a) is improper.

D. THE EXAMINER'S REJECTION OF CLAIMS 29 and 30 UNDER 35 U.S.C. §103(a) IS IMPROPER

The Examiner's rejection of dependent claims 29 and 30 under 35 U.S.C. §103(a) is improper because the combination of references does not teach each and every limitation of the claims. Claims 29 and 30 stand or fall together as a group.

The Examiner's rejection of claims 29 and 30 under 35 U.S.C. §103(a) based on the combination of Beier '681, Murry et al, Beier '126, and Nash is improper because the proposed combination of references does not teach each and every limitation of the claim.

Dependent claim 29 recites:

"The system of claim 28 wherein the first device actuation unit is further configured to receive the third RF signal and to maintain activation of the first device during a first time period from at least receipt of the first RF signal to receipt of the third RF signal, if the first time period is less than or equal to a threshold time period." Dependent claim 30 recites similar limitations.

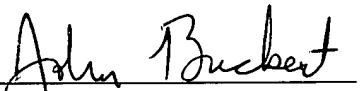
Nash discloses a solid-state timer. However, neither Nash nor any of the other references provide any teaching of maintaining activation of the first device during a first time period from at least receipt of the first RF signal to receipt of the third RF signal, if the first time period is less than or equal to a threshold time period, as recited in claims 29 and 30.

Because the proposed combination of Beier '681, Murry et al., Beier '126, and Fornoff et al. does not teach each and every limitation of claims 29 and 30, applicant submits that the rejection of claims 29 and 30 under 35 U.S.C. §103(a) is improper.

E. CONCLUSION

In view of the foregoing arguments, applicant respectfully submits that the present application for a system and a method for remotely controlling devices is novel and unobvious. Further, a reversal of the rejections of record, or such recommendation or relief as equity may require, is respectfully requested.

Respectfully Submitted,

By 
John F. Buckert
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Date: November 20, 2006

CLAIMS APPENDIX

1. A system for remotely controlling devices, comprising:

a foot pedal unit having a moveable member;

a first microprocessor operatively associated with the foot pedal unit and an RF transmitter, the first microprocessor configured to determine whether at least a first device or a second device is selected, the first microprocessor further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected, the first RF signal having a first identifier value, the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected, the second RF signal having a second identifier value; and

a first device actuation unit configured to receive the first RF signal, the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device, the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the first predetermined value.

4. The system of claim 1 wherein the first device actuation unit includes a second microprocessor and an RF receiver operably coupled to the second microprocessor.

5. The system of claim 1 further comprising a second device actuation unit configured to receive the second RF signal, the second device actuation unit further configured to compare the second identifier value to a second predetermined value associated with the second device, the second device actuation unit further configured to actuate the second device when the second identifier value corresponds to the second predetermined value.

7. The system of claim 1 further comprising an electrical switch operatively coupled to the moveable member and to the first microprocessor, wherein at least partial displacement of the moveable member actuates the electrical switch, the first microprocessor configured to induce the transmitter to transmit the first signal in response to actuation of the switch.

8. The system of claim 1 further comprising a pneumatic valve coupled to a conduit, the valve further operatively coupled to the moveable member, the system further including a pneumatic switch operatively coupled to the first microprocessor and to the conduit, wherein at least partial displacement of the moveable member actuates the pneumatic valve increasing a pressure in the conduit, when the pressure is greater than a predetermined pressure the pneumatic switch is actuated inducing the first microprocessor to induce the RF transmitter to transmit the first RF signal.

9. The system of claim 1 further comprising a pneumatic valve operatively coupled to a conduit, the valve being further operatively coupled to the movable member, the valve opening in response to at least partial displacement of the moveable member, the system further including a pressure sensor coupled to the conduit generating a pressure signal indicative of the pressure in the conduit that is transmitted to the first microprocessor.

10. The system of claim 9 wherein the first microprocessor is configured to induce the RF transmitter to generate the first RF signal when the pressure signal indicates the pressure is greater than a predetermined pressure.

11. The system of claim 9 wherein the first microprocessor is configured to induce the RF transmitter to generate the first RF signal containing a command value determined from the pressure signal.

12. The system of claim 1 further comprising a position sensor operatively coupled to the movable member of the foot pedal unit, the position sensor generating a third signal

indicative of a position of the moveable member that is received by the first microprocessor, the first microprocessor configured to induce the RF transmitter to generate the first RF signal containing a command value determined from the position signal.

13. The system of claim 12 wherein the position signal is indicative of an angular position of the movable member.

14. The system of claim 12 wherein the position signal is indicative of a linear position of the movable member.

15. The system of claim 1 wherein the first device comprises a dental implement.

16. The system of claim 1 wherein the first device comprises a medical implement.

17. The system of claim 1 wherein the first device comprises one of a drill, a microprocessor position-controllable dental chair, an infrared photo-optic imaging camera, a dental irrigator, an intra-oral camera, a video capture circuit, a laser, an air-abrasion unit, an electro-surgery unit, an ultrasonic teeth cleaning unit, a piezo-ultrasonic unit, an air polishing prophylaxis device, a gum depth measurement probe, a surgical microscope with controllable focusing adjustment, a microprocessor controlled anesthetic delivery system, and an endodontic heat source device.

18. The system of claim 1 wherein the first device comprises a video capture board, the system further comprising a first device actuation unit operatively coupled to the video capture board, the first device actuation unit configured to receive the first RF signal and to induce the video capture board to store a video image in a memory in response to the first RF signal.

20. The system of claim 1 further comprising:

a second microprocessor operatively coupled to an RF receiver, and

an RF transmitter unit configured to transmit a third RF signal having the first predetermined value associated with the first device for selecting the first device, the second microprocessor being further configured to store the first predetermined value in a memory when the third RF signal is received by the RF receiver.

22. A method for remotely controlling devices, comprising:

determining when a first device is selected, utilizing a microprocessor;

inducing an RF transmitter to transmit a first RF signal having a first identifier value in response to at least partial displacement of a moveable member on a foot pedal unit when the first device is selected, utilizing the microprocessor;

determining when a second device is selected, utilizing the microprocessor;

inducing the RF transmitter to transmit a second RF signal having a second identifier value in response to at least partial displacement of the moveable member on the foot pedal unit when the second device is selected, utilizing the microprocessor;

receiving the first RF signal at a device actuation unit;

comparing the first identifier value to a first predetermined value associated with the first device; and

controlling the first device utilizing the device actuation unit based on the first RF signal when the first identifier value corresponds to the first predetermined value associated with the first device.

24. The method of claim 22 further comprising controlling the second device utilizing the device actuation unit based on the second RF signal when the second identifier value corresponds to a second predetermined value associated with the second device.

25. The method of claim 22 wherein the first device comprises a dental implement or a medical implement.

26. The method of claim 22 wherein the first device comprises one of a drill, a microprocessor position-controllable dental chair, an infrared photo-optic imaging camera, a dental irrigator, an intra-oral camera, a video capture circuit, a laser, an air-abrasion unit, an electro-surgery unit, an ultrasonic teeth cleaning unit, a piezo-ultrasonic unit, an air polishing prophylaxis device, a gum depth measurement probe, a surgical microscope with controllable focusing adjustment, a microprocessor controlled anesthetic delivery system, and an endodontic heat source device.

27. The method of claim 22 wherein the controlling step includes inducing a video capture board to store a video image in a memory in response to the first signal.

28. The system of claim 1 wherein the first microprocessor is further configured to induce the RF transmitter to transmit a third RF signal having the first identifier value in response to at least partial displacement of the moveable member when the first device is selected.

29. The system of claim 28 wherein the first device actuation unit is further configured to receive the third RF signal and to maintain activation of the first device during a first time period from at least receipt of the first RF signal to receipt of the third RF signal, if the first time period is less than or equal to a threshold time period.

30. The method of claim 22 further comprising:

inducing the RF transmitter to transmit a third RF signal having the first identifier value in response to at least partial displacement of the moveable member when the first device is selected; and

receiving the third RF signal at the device actuation unit and maintaining activation of the first device during a first time period from at least receipt of the first RF signal to receipt of the third RF signal, if the first time period is less than or equal to a threshold time period.

RELATED PROCEEDINGS APPENDIX

Applicant has filed a Notice of Appeal for U.S. Patent Application No. 10/464,369 filed on June 17, 2003. The Notice of Appeal was filed on July 11, 2006.

EVIDENCE APPENDIX

Attached hereto are U.S. Patent Nos. 4,571,681, 4,156,187, 4,305,126, 4,114,275, 5,931,669, and 4,171,572 which were cited by the Examiner in the second Final Office Action of August 15, 2006.